

IN THE CLAIMS

The status of each claim in the present application is listed below.

1. (Currently Amended) A process for producing a carbon-containing SiO₂-containing insulating layer on chips, wherein at least one silicon compound selected from the group consisting of (1) alkylarylalkoxysilanes, ~~(2) arylalkoxysilanes~~, (3) C₁- and C₃-C₅ alkyl orthosilicates, (4) orthosilicates having glycol radicals, (5) orthosilicates having polyether radicals, ~~(6) hydrogenalkoxysilanes~~, (7) hydrogenaryloxysilanes, (8) alkyl-hydrogensilanes, (9) alkylhydrogenalkoxysilanes, (10) dialkylhydrogenalkoxysilanes, (11) arylhydrogensilanes, (12) arylhydrogenalkoxysilanes, (13) acetoxysilanes, (14) silazanes, (15) siloxanes, (16) organofunctional silanes bearing at least one acetoxy, azido, amino, cyano, cyanato, isocyanato or ketoximato group, (17) organofunctional silanes containing at least one heterocycle, with the silicon atom being able to belong to the heterocycle itself or be covalently bound to the heterocycle, (18) mixtures of at least two silicon compounds described above and (19) mixtures of tetraethoxysilane with at least one silicon compound described above, is used as precursor.

2. (Original) The process as claimed in claim 1, wherein the production of an SiO₂-containing insulating layer on chips is carried out by means of the CVD technique or by the spin-on method.

3. (Currently Amended) The process as claimed in claim 1, wherein the at least one silicon compound is selected from the group consisting of ~~phenyltrimethoxysilane,~~
~~phenyltriethoxysilane,~~ propylmethyldimethoxysilane, methyl orthosilicate, n-propyl orthosilicate, tetrabutyl glycol orthosilicate, amyltrimethoxysilane, bis(methyltriethyleneglycol)dimethylsilane, 2-(cyclohex 3-enyl)ethyltriethoxysilane, cyclohexylmethyldimethoxysilane, cyclohexylmethyltrimethoxysilane, cyclopentylmethyldimethoxysilane, cyclopentyltrimethoxysilane, di-i-butyl dimethoxysilane, di-i-propyl dimethoxysilane, dicyclopentyl dimethoxysilane, dimethyldiethoxysilane, diphenyldimethoxysilane, vinyltriacetoxysilane, 2-phenylethyltriethoxysilane, 2-phenylethylmethyldiethoxysilane, 3-methacryloxypropyltrimethoxysilane, 3-acryloxypropyltrimethoxysilane, 3-methacryloxy-2-methyl-propyltrimethoxysilane, 3-acryloxy-2-methylpropyldimethoxysilane, methyldiethoxysilane, methylpropyldiethoxysilane, methylpropyldimethoxysilane, ~~trimethoxysilane,~~
~~triethoxysilane,~~ dimethylethoxysilane, triethylsilane, methyltriacetoxysilane, ethyltriacetoxysilane, vinyltriacetoxysilane, di-tert-butoxydiacetoxysilane, heptamethyldisilazane, hexamethyldisilazane, N,O-bis(trimethylsilyl)acetamide, 1,3-divinyltetramethyldisilazane, hexamethyldisiloxane, 1,3-divinyltetramethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, 3-acetoxypentyltrimethoxysilane, 3-acetoxypentyltriethoxysilane, trimethylsilyl acetate, 3-azido-propyltriethoxysilane, N-(n-butyl)-3-aminopentyltrimethoxysilane, 3-amino-pentyltrimethoxysilane, 3-aminopentyltriethoxysilane, 3-amino-2-methylpentyl-triethoxysilane, 3-aminopentylmethyldimethoxysilane, 3-aminopentylmethyldiethoxysilane, 3-cyanopentyltriethoxysilane, trimethylsilyl nitrile, 3-cyanatopentyltrimethoxysilane, 3-cyanatopentyltriethoxysilane, 3-isocyanatopentyltrimethoxysilane, isocyanatopentyltriethoxysilane, methyltris(methylethylketoximate)silane, N-(1-

triethoxysilyl)ethylpyrrolidone-2, 3-(4,5-dihydroimidazolyl)propyltriethoxysilane, 1-trimethylsilyl-1,2,4-triazole, 3-morpholinopropylmethyldiethoxysilane, 3-morpholinopropyltriethoxysilane and 2,2-dimethoxy-1-oxa-2-sila-6,7-benzocycloheptane and condensed or cocondensed silanes, oligosiloxanes and polysiloxanes.

4. (Withdrawn) An insulating layer for chips obtainable as claimed in claim 1.

5. (Withdrawn) A chip having an insulating layer obtainable as claimed in claim 1.

6. (Previously Presented) The method of using precursors as set forth in claim 1 for producing an insulating layer on chips.

7. (Previously Presented) The process as claimed in claim 1, wherein the at least one silicon compound is selected from the group consisting of (1) alkylarylalkoxysilanes, (2) arylalkoxysilanes, (3) C₁- and C₃-C₅ alkyl orthosilicates, (4) orthosilicates having glycol radicals, (5) orthosilicates having polyether radicals, (6) hydrogenalkoxysilanes, (7) hydrogenaryloxysilanes, (8) alkyl-hydrogensilanes, (9) alkylhydrogenalkoxysilanes, (10) dialkylhydrogenalkoxysilanes, (11) arylhydrogensilanes, (12) arylhydrogenalkoxysilanes, (13) acetoxysilanes, (14) silazanes, (15) siloxanes, (16) organofunctional silanes bearing at least one acetoxy, azido, amino, cyano, cyanato, isocyanato or ketoximato group, (17) organofunctional silanes containing at least one heterocycle, with the silicon atom being able to belong to the heterocycle itself or be covalently bound to the heterocycle.

8. (Previously Presented) The process as claimed in claim 1, wherein said chips comprise silicon wafers.